

*Excerpted from WAR PLAY: Video Games and the Future of Armed Conflict by Corey Mead*

*Introduction*

One June day, I visited a brick-and-concrete warehouse on a dead-end street of squat buildings in Playa Vista, California. The outer part of the warehouse housed a suite of glass-fronted offices, while the main room was strewn with sandbags, corrugated metal, piles of fake rubble, and twisted rebar. Placed throughout this room were strategic groupings of “digital flats,” large rear-projection screens that employ digital graphics to depict particular settings and geographic locations. The warehouse, a former television studio, was owned by the Institute for Creative Technologies (ICT), a joint venture between the military and the University of Southern California. Funded by the army to the tune of hundreds of millions of dollars, the ICT’s declared mission is “to build a partnership among the entertainment industry, Army, and academia with the goal of creating synthetic experiences so compelling that participants react as if they are real.” As the ICT’s executive director, Dr. Randall Hill, said to me, “One way of seeing our mission, one way we view it, is that we’re trying to forge leaders and revolutionize learning — in general, not just in the military. It’s really about how you use digital interactive media, forms of media, to aid the learning process.”

The main room of the warehouse in which I stood contained *Flat-World*, one of the ICT’s earliest projects, described as “a mixed reality environment where users interact with both the physical and virtual worlds seamlessly.” *FlatWorld* was conceived of and designed by video game designers, special effects artists, research scientists, and Pentagon personnel working together to create the army version of *Star Trek*’s fictional “holodeck,” a simulated-reality facility that mimics the environments of alien planets. The military’s goal in creating this type of fully immersive domain was to give soldiers the most accurate training environment possible outside of live field exercises.

As I walked through *FlatWorld*, Jarrell Pair, my guide, led me through a door into a tiny room fronted by a large digital screen. Onto the screen (the “flat”) was projected the computer-animated version of a deserted city street lined with squat gray residential buildings, a white mosque with two minarets, telephone wire, and palm trees. A Middle Eastern carpet covered the floor of the room, with pieces of concrete and wrecked furniture heaped in one corner. Broken ceiling panels hung overhead. After instructing me to put on a pair of polarized 3-D glasses, Pair began pressing buttons on a small controller pad. Suddenly, in the open wooden doorway to my right, there appeared a life-size, computer-generated army officer yelling at me that the enemy was approaching. Just then a computer-animated helicopter roared in overhead and began strafing the street, as insurgents and U.S. soldiers appeared along the road, each group firing at the other. One insurgent popped up in the open doorway where the American officer had been. He pointed his machine gun in my direction and started firing, and the wall to my left began sending out virtual clouds of plaster dust, which cleared to reveal pockmarks where the bullets had lodged. The ground in the room began to shake, and the volume of the helicopter overhead and the gunfire in the street increased to the point of near discomfort. A little boy ran into the street and shouted, “U.S.A.! Over here!” Pair pressed another button and a tank rounded the corner at the end of the street, then headed straight toward me. As it

bore down, the combination of the noise, the rumbling ground, and the tank cannon pointing at my face stirred genuine anxiety in me. The anxiety built for several seconds until, at the moment when the tank appeared about to run me over, Pair pressed another series of buttons and the room returned to its original state — no tank, no insurgents, no U.S. soldiers, no helicopter, no noise, no rumbling ground, just a panel projecting the digital image of a now empty city street.

With its virtual, immersive nature, *FlatWorld* — currently in use as the Joint Fires and Effects Training System at Fort Sill, Oklahoma — is a large-scale example of the U.S. military's changing approach to training and educating its soldiers. While live field exercises and training manuals are still crucial, they are increasingly being supplemented and supplanted by video games and digital simulations,\* which are used to teach everything from battlefield operations to cultural interaction to language skills to weapons handling. Though the specifics vary, today every armed forces service member engages in some form of virtual learning. Helping troops protect themselves or gain the advantage against the endlessly mutating insurgencies that mark today's wars requires a constant shifting of strategies and tactics and the kinds of rapid adjustments in scenarios that print-based manuals, which are updated every six months at the most, can't keep up with. Video games, in contrast, allow for near-instantaneous user modification, meaning that soldiers in the field can, on a daily basis, input the enemy's latest fighting tactics, so that troops who are stateside can keep their training up-to-date. As one Marine officer said to me, events in military gaming are moving "at the speed of war." The military's use of video games also extends beyond the battlefield: games are used to treat soldiers suffering from post-traumatic stress disorder, and they aid veterans who are reintegrating into civil society.

\* For simplicity's sake, in this book I use the term *video game* to refer to a variety of interactive digital and virtual applications.  
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